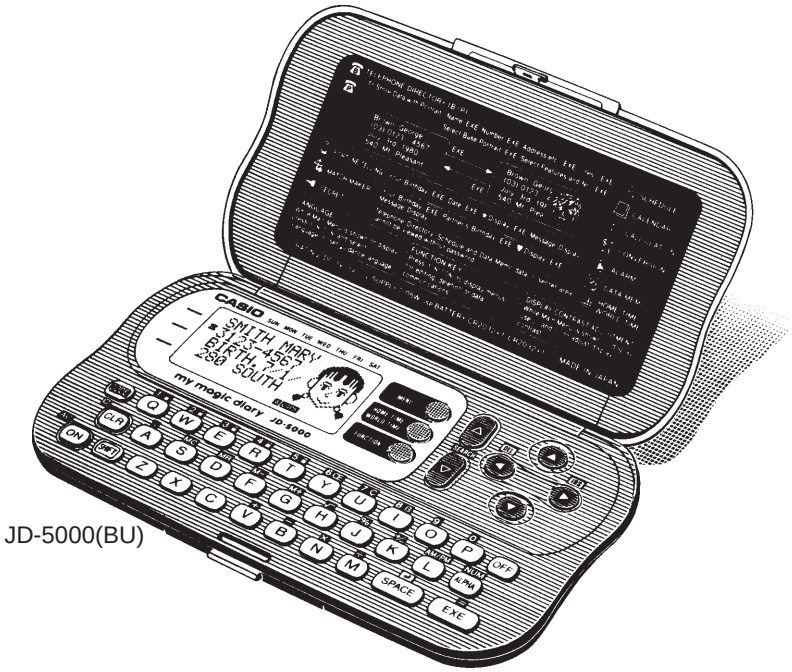
SERVICE MANUAL & PARTS LIST (without price)

JD-5000(LX-171)

JUL. 1993



JD-5000(BU)

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CASIO®

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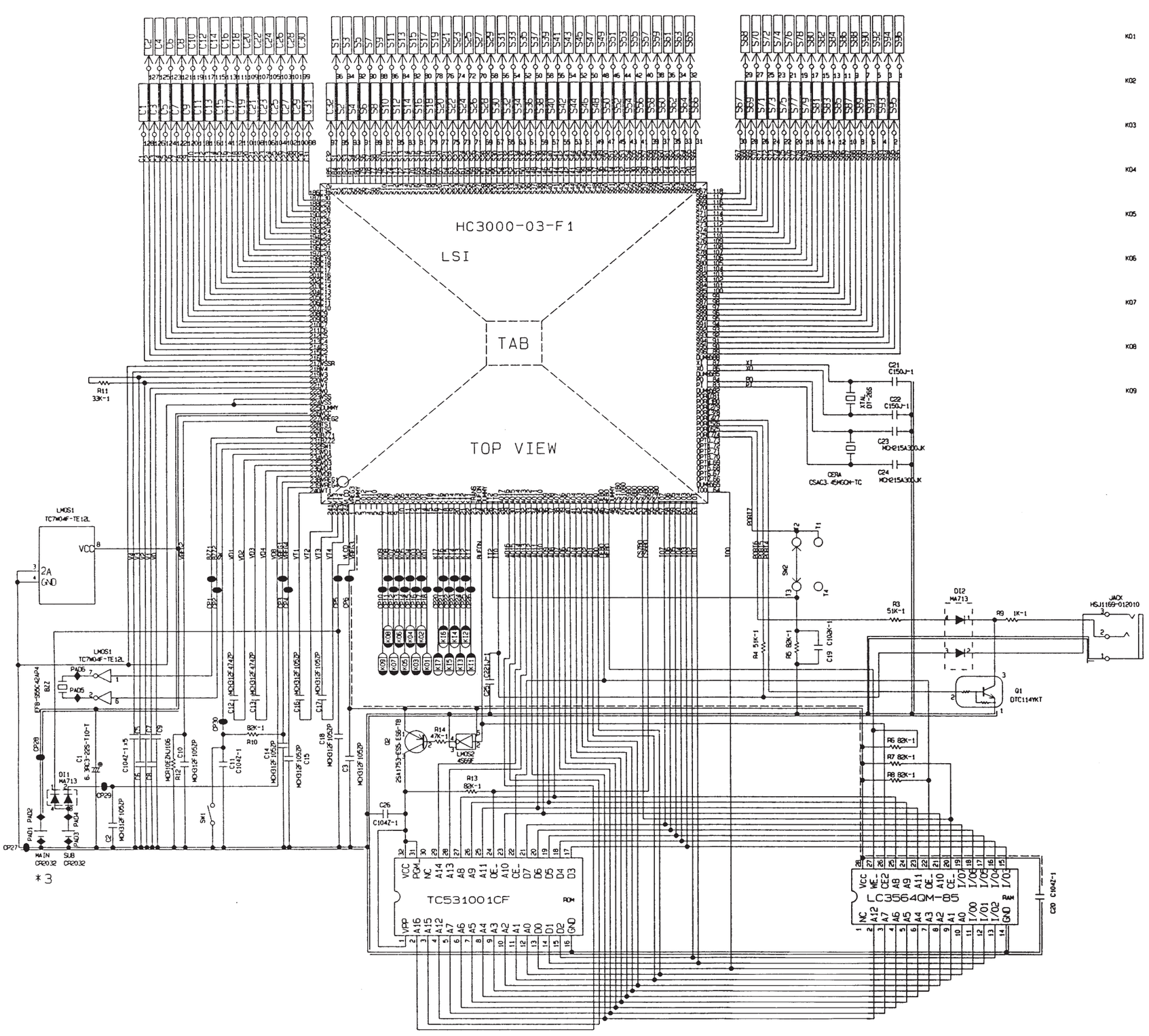
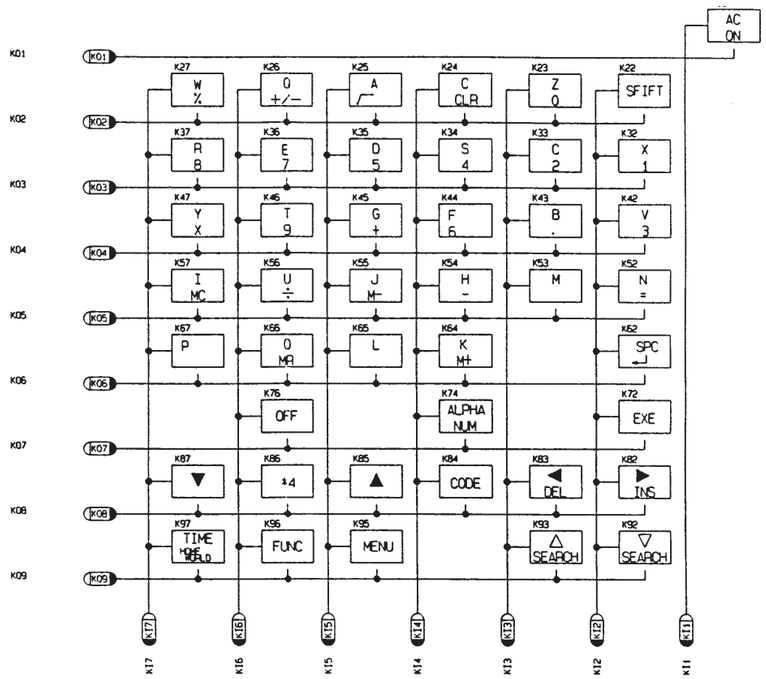
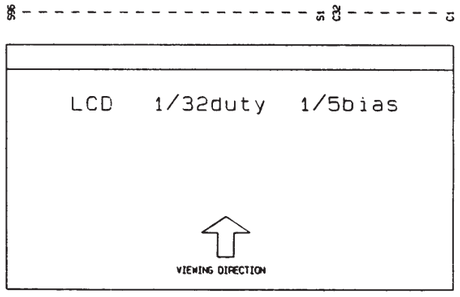
1. SCHEMATIC DIAGRAM







NOTE

● : Function checking points.

♦ : Power supply checking points.

2. SPECIFICATIONS

Display:	Liquid crystal display	
Memory Capacity:	6,144 bytes	
Power Supply:	Two lithium batteries (CR2032) ... Main and Back-up	
Power Consumption:	0.05W	
Battery Life:	Main battery:	Approximately 7,000 hours (1 hour use per day)
	Back-up battery:	Approximately 3 years after the low main battery warning appears on the display
Auto Power Off:	Approximately 6 minutes after last key operation	
Ambient Temperature Range:	0°C ~ 40°C (32°F ~ 104°F)	
Dimensions:	Open:	9.3(H) × 145(W) × 163(D) mm ($^3/_8$"(H) × 5 $^3/_4$"(W) × 6 $^3/_8$"(D))
	Closed:	13.9(H) × 145(W) × 84(D) mm ($^1/_2$"(H) × 5 $^3/_4$ "(W) × 3 $^1/_4$"(D))
Weight:	112 g(4 oz) including batteries	

3. LSI PIN FUNCTION

1. CPU (HC3000-03-F1)

Pin No.	Signal	In/Out	Function
1	VREG3	Out	Power supply for RAM / 3(V)
2	DMY	–	Not used
3 ~ 5	KO10 ~ 12	Out	Not used
6 ~ 14	KO1 ~ 9	Out	Key scan signal
15	KI8	In	Not used
16 ~ 22	KI1~7	In	Key input signal
23 , 25	TRANS, DUMMY	–	Not used
24	DUFON	Out	Power supply control for ROM
26	IT2	In	Battery switch position sensor
27	IT0	In	Reception data input
28	AO17	Out	Not used
29 ~ 45	A0 ~ A16	Out	Address bus
46	OEB0	Out	Output enable signal for RAM and ROM
47	WEB0	Out	Write enable signal for RAM
48 ~ 52		–	Not used
53	CS7B0	Out	Chip enable signal for RAM
54	CS6	Out	Chip enable signal for ROM
55, 56		Out	Not used
57 ~ 64	IO0 ~ IO7	In/Out	Data bus
65 ~ 73		–	Not used
74	PORT7	–	Battery switch on: "L" / 0[V] off: "H" / 5[V]

Pin No.	Signal	In/Out	Function
75 ~ 77	PORT4~6	I/O	For data communication
78 ~ 82		–	Not used
83, 84	PI, PO	In/Out	Main clock terminal
85	DUMMY	–	Not used
86, 87	XI, XO	In/Out	Clock terminal
88	DUMMY	–	Not used
89 ~ 184	S1 ~ S96	Out	Segment signal for display
185 ~ 216	C1 ~ C32	Out	Common signal for display
217	VSSR	In	GND / 0[V]
218 ~ 222	V0 ~ V4	Out	The voltage for LCD drive OFF : 0[V] ON; V0 : 3.6 (Min) ~ 5.8 (Max) [V] V1 : 2.9 (Min) ~ 4.6 (Max) [V] V2 : 2.1 (Min) ~ 3.5 (Max) [V] V3 : 1.4 (Min) ~ 2.5 (Max) [V] V4 : 0.7 (Min) ~ 1.3 (Max) [V]
223, 224	VSS	In	GND / 0[V]
225	DUMMY	–	Not used
226	VCC	In	Power supply / 3[V]
227	VREG2	Out	2 [V]
228, 229	TS1, 2	–	Test for manufacture
230, 231	BZ1, 2	Out	Buzzer terminal
232	SW1	In	2.6[V] While pushing the reset button: 0[V]
233, 234	VD1, 2	–	VD1: 4.7[V] VD2: 1.5[V]
235, 236	VD3, 4	–	VD3: 4.7[V] VD4: 1.5[V]

Pin No.	Signal	In/Out	Function
237	VDB	In	Low battery detection VDB < 4.4[V] ⇒ Low battery message
238, 239	VREG1, 4	–	VREG1: 2.6 [V] VREG4: 5.0 [V]
240 ~ 243	VT1 ~ VT4	–	VT1 : 1.0[V] VT2 : 2.9[V] VT3 : 2.0[V] VT4 : 3.9[V]
244	VLCD	Out	5.8 [V]

2. RAM (LC3564QM-85)

Pin No.	Signal	In/Out	Function
1 ~ 10	A0~A7, A12, A14	In	Address bus
11 ~ 13	I/O 0 ~ I/O 2	In/Out	Data bus
14	GND	In	GND / 0[V]
15 ~ 19	I/O 3 ~ I/O 7	In/Out	Data bus
20	CE	In	Chip enable signal
21	A10	In	Address bus
22	OE	In	Output enable signal
23 ~ 26	A8, A9, A11, A13	In	Address bus
27	WE	In	Write enable signal
28	VCC	In	Power supply / 3[V]

4. OPERATION CHECK

STEP	OPERATION	DISPLAY	NOTE
1	(MENU) Then short in the check pad about two seconds.	Caution! This is TEST To Escape Press AC KEY	The check pad is located left side of the battery switch.
2	(EXE)	1. RAM 2. DISP 3. KEY 4. TRANS 5. RESET 6. FCC To Esc Press AC	
3	(1)	RAM OK!	RAM check
4	(EXE)	1. RAM 2. DISP 3. KEY 4. TRANS 5. RESET 6. FCC	
5	(2)	All dots display	DISPLAY check
6	(EXE)	No display	
7	(EXE)	Checker display	
8	(EXE)	Reverse checker display	
9	(EXE)	Frame display	
10	(EXE)	1. RAM 2. DISP 3. KEY 4. TRANS 5. RESET 6. FCC	
11	(3)	MENU	Key check Push the key sequertially appeared on the display.
12	(MENU) (TIME) (FUNC) . . . . . (SHIFT)	TIME, FUNC, . . . , SHIFT	Check the key sound.
13	(EXE)	1. RAM 2. DISP 3. KEY 4. TRANS 5. RESET 6. FCC	
14	(5)	RESET!	After a half second, the main menu will appear.

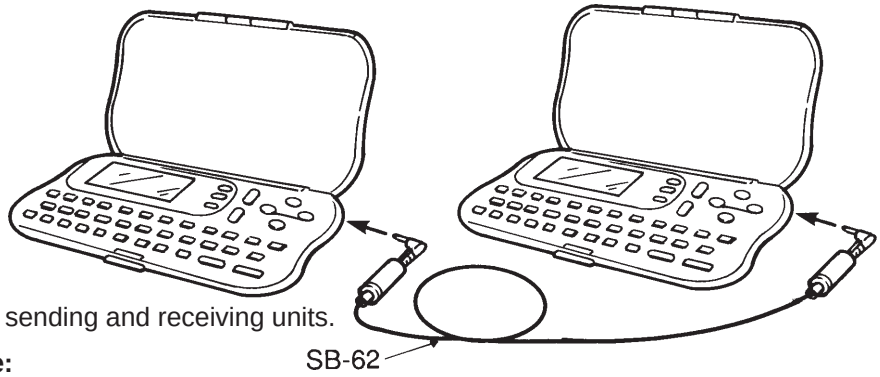
✻ CAUTION : If customer's data are stored in the unit, all data will be corrupted by this operation.

5. TO SAVE THE DATA TO OTHER MACHINE

CASIO's SB-62 Data Communication Cable is available as an option. You can use this to connect My Magic Diary to another My Magic Diary unit, or to a CASIO SF-A10, SF-A20, or SF-A30. Data can be shared among all of these products.

Basic hardware set up for data communication:

1. Switch off the power of both the sending and receiving units.
2. Remove the connector covers of both units.
3. Connect the two units with a CASIO SB-62 Data Communication Cable. Be sure to insert the connectors at the ends of the cable securely into the units.



4. Switch on the power of both sending and receiving units.

To prepare one unit to receive:

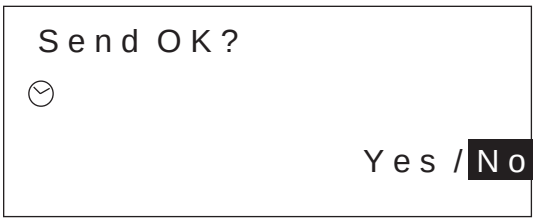
1. On the unit intended for reception, while in the main menu or a data display, press **FUNCTION**. Then use ▼ to highlight "Communication." Press **EXE**.
2. Use the ▲ or ▼ to highlight "Receive Data." Press **EXE**.

Sending Data for a Specific Mode

You can send either a single data item (the smallest packet of data which can be sent in the Calendar Mode, for example, is a single month), or all the data items stored in a specific mode. Different procedures are used to send all the data in a mode, depending on whether you start from within that mode, or from the main menu.

To send one data item:

1. Enter the mode that contains the data; then search for and display the data you wish to send.
2. Press **FUNCTION**. Then use ▼ to highlight "Communication." Press **EXE**.
3. Use ▲ to highlight "Send Data." Press **EXE**.
4. Use ▲ to highlight "1 Data." Press **EXE**.



5. Use ◀ to highlight "Yes." Then press **EXE**. This begins data transfer to the receiving unit.

To send all the data in a mode, starting from within that mode:

1. Enter the mode that contains the data you want to send. Then press △ or ▽ to display the data for that mode.
2. Press **FUNCTION**. Then use ▼ to highlight "Communication." Press **EXE**.
3. Use ▲ to highlight "Send Data." Press **EXE**.
4. Use ▲ and ▼ to highlight "Mode Data." Press **EXE**.
5. Use ◀ to highlight "Yes." Then press **EXE**. This begins data transfer to the receiving unit.
6. After the transmission has been completed, the data display for the item sent will appear on screen.

To send all the data in a mode, starting from the main menu:

1. Start from the main menu.
2. Press **FUNCTION**. Then use ▼ to highlight "Communication." Press **EXE**.
3. Use ▲ to highlight "Send Data." Press **EXE**.
4. Use ▲ to highlight "Mode Data." Press **EXE**.
5. Use ▲ and ▼ to select the name of the mode from which data you wish to send. Press **EXE**.
6. Use ◀ to highlight "Yes." Then press **EXE**. This begins data transfer to the receiving unit.
7. After the transmission has been completed, the main menu will reappear.

Sending All Data

Important!

The following procedure sends either all Open Memory Area data or all Secret Memory Area data. Before starting to transmit, be sure to access the memory area (Open or Secret) which contains data you wish to send.

To send all data:

1. Begin from either the main menu or from a data display (Telephone Directry, Schedule, Data Memo "Diary", or Calendar).
2. Press **FUNCTION**. Then use ▼ to highlight "Communication." Press **EXE**.
3. Use ▲ to highlight "Send Data." Press **EXE**.
4. Use ▲ to highlight "All Data." Press **EXE**.
5. Use ◀ to highlight "Yes." Then press **EXE**. This begins data transfer to the receiving unit.
6. After the transmission has been completed, the display you started from will reappear.

About the "Set up" Menu Item

You will probably notice that the menu appears on the display after you select "Communication" from the function menu and press **EXE**. The "Set up" item contained in that menu is used for setting the parameters of the My Magic Diary. Note, that the parameters should always be set to "None" (Parity) and "9600" (BPS) for data communications between two units.

Features and Functions

Telephone Directory Mode

Use this to keep names, phone numbers, and addresses. There are two storage areas, so you can keep school and personal data separate. You can also include fun faces of the people whose names and addresses you keep.

Schedule Mode

Stores the date, time, and type of each appointment. You can select icons to indicate each appointment at a glance.

Calendar Mode

Displays the calendar for any month from January, 1901, to December, 2099. You can specify holidays for highlighting.

Data Memo "Diary" Mode

Stores notes and special thoughts. Diary entry consists of a memo name and the memo's contents.

Secret Memory Area

Stores your private thoughts you wish to keep confidential. No one can gain access to the Secret Memory Area without knowing your password.

Timekeeping Mode

Home Time displays the current time where you are. World Time shows the time in any of 29 zones around the globe. You can use 24-hour or 12-hour format, and can even specify daylight savings time.

Alarm Mode

Lets you set alarms to the minute, for alarms to go off every hour, or for a single time each day. You can also set the Schedule Alarm and control the key input tone.

Fortune Telling Mode

Once you have entered your birthday, you can check your fortune today, or for any day. Have fun telling your friend's fortune too.

Match Maker Mode

Tells you whether or not you are compatible with that special someone.

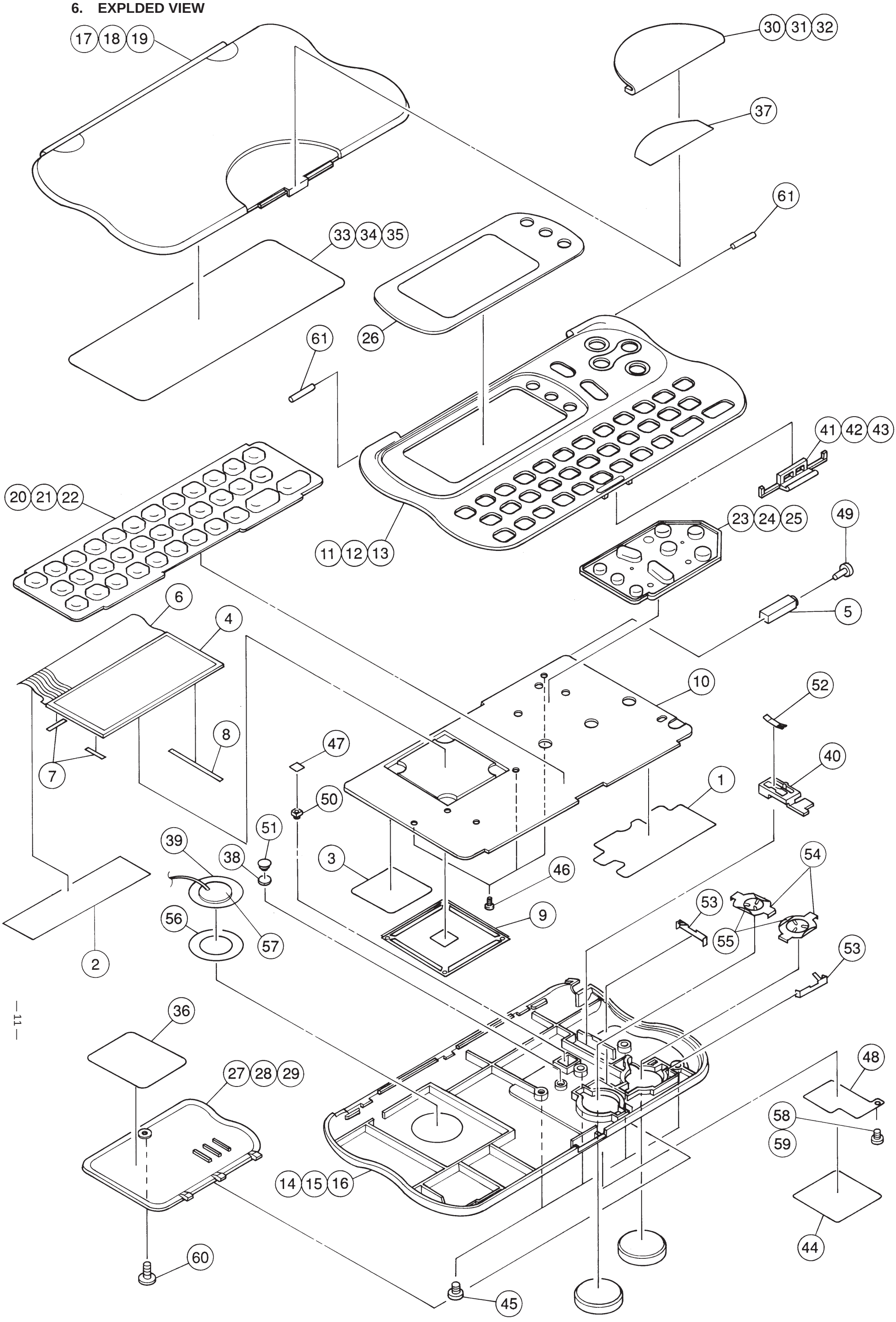
Conversion Mode

Helps you compare US dollar values against six foreign currencies (monies), or with combinations of currency units.

Calculator Mode

A 10-digit calculator performs most common numerical operations including percents, square roots and memory.

6. EXPLDED VIEW



7. PARTS LIST

I: JD-5000GN
II: JD-5000BK
III: JD-5000BU

N	Item	Code No.	Parts Name	Specification	Q'ty I	Q'ty II	Q'ty III	M	FOB Japan N.R.Yen Unit Price	R
	1. L171-1 ASS'Y									
N	1	6405 6420	Tape A-L171	A413616-1	1	1	1	20		C
	2	6403 5450	Tape A-L170	A412893-1	1	1	1	20		C
	3	6403 9330	Tape C-L170	A413108-1	1	1	1	20		C
N	4	3335 4249	LCD	CD412-TS	1	1	1	1		B
	5	3501 6538	Jack	HSJ1169-012010	1	1	1	5		X
	6	5610 7140	Heat seal L170	A312379-1	1	1	1	1		B
	7	6403 5430	Adhesive tape A-L170	A412891-1	1	1	1	20		C
	8	6403 8780	Adhesive tape B-L170	A412891-2	1	1	1	20		C
N	9	6405 6451	COF3000-F1 sub ass'y	A312545*3	1	1	1	1		B
N	XTAL	2590 1288	Crystal oscillator	C-002RX	1	1	1	10		C
	C1	2803 6085	Electrolytic capacitor (V)	6.3RC3-22X-T10	1	1	1	10		C
N	ROM	2011 6251	LSI	TC531001CF-C067	1	1	1	1		C
N	RAM	2011 4088	LSI	LC3564QM-85	1	1	1	1		C
N	CERA	2590 1498	Ceramic oscillator	CSA3.45MG	1	1	1	5		C
N	10	6405 6270	L171-1 ASS'Y	A110754*1	1	1	1	1		A
	2. L171-1M ASS'Y									
	LMOS2	2105 0686	L-MOS	TC4S69F-TE85R	1	1	1	10		C
N	LMOS1	2105 2898	L-MOS	TC7W04F-TE12L	1	1	1	5		C
	Q1	2259 0959	Chip digital transistor	DTC114YKT-146	1	1	1	20		C
N	Q2	2250 0700	Chip transistor	2SA1753-ES5,ES6-TB	1	1	1	20		C
	DI1,2	2390 0364	Schottky diode	MA713-TX	2	2	2	10		C
N	R3,4	2796 1540	Chip resistor	RC210 513J	2	2	2	20		C
N	R5,6,7,8,10,13	2796 1554	Chip resistor	RC210 823J	6	6	6	20		C
N	R9	2796 1533	Chip resistor	RC210 102J	1	1	1	20		C
N	R11	2796 1547	Chip resistor	RC210 333J	1	1	1	20		C
N	R12	2796 1750	Chip resistor	RC210 106J	1	1	1	20		C
	R14	2792 0462	Chip resistor	MCR10EZHJ473	1	1	1	20		C
	C2,3,10,14,15, 16,17,18	2845 1925	Chip capacitor	MCH312F105ZP	8	8	8	10		C
N	C5,6,7,8,9, 11,20,26	2845 3626	Chip capacitor	MMCC104	8	8	8	20		C
	C12,13	2845 3486	Chip capacitor	MCH312F474ZP	2	2	2	10		C
N	C19	2845 3640	Chip capacitor	MMCC102	1	1	1	20		C
N	C23,24	2845 3619	Chip capacitor	MMCC300	2	2	2	20		C
	C25	2845 3654	Chip capacitor	MMCC221	1	1	1	20		C
N	C21,22	2845 4172	Chip capacitor	MMCC150	2	2	2	20		C
	3. COMPONENT									
N	11	6405 6290	Upper case L171	A110730-1	1	0	0	1		C
N	12	6388 1650	Upper case L171B	A110730-2	0	1	0	1		C
N	13	6406 3610	Upper case L171C	A110730-3	0	0	1	1		C
N	14	6405 6300	Lower case L171	A110731-1	1	0	0	10		C
N	15	6406 3620	Lower case L171B	A110731-2	0	1	0	10		C
N	16	6406 3630	Lower case L171C	A110731-3	0	0	1	10		C
N	17	6405 6310	Hard case L171	A110732-1	1	0	0	5		C
N	18	6406 3640	Hard case L171B	A110732-2	0	1	0	5		C
N	19	6406 3650	Hard case L171C	A110732-3	0	0	1	5		C
N	20	6405 6330	Rubber key A-L171	A211170-1	1	0	0	1		C
N	21	6406 3660	Rubber key A-L171B	A211170-2	0	1	0	1		C
N	22	6406 3670	Rubber key A-L171C	A211170-3	0	0	1	1		C
N	23	6405 6340	Rubber key B-L171	A211184-1	1	0	0	5		C
N	24	6406 3680	Rubber key B-L171B	A211184-2	0	1	0	5		C

M – Minimum order/supply quantity
R – Rank
Q'ty – Quantity used per unit

A: Essential
B: Stock recommended
C: Others
X: No stock recommended

N	Item	Code No.	Parts Name	Specification	Q'ty			M	FOB Japan N.R.Yen Unit Price	R
					I	II	III			
N	25	6406 3690	Rubber key B-L171C	A211184-3	0	0	1	5		C
N	26	6405 6350	Display plate L171	A312938-1	1	1	1	10		C
N	27	6405 6360	Battery cover L171	A312939-1	1	0	0	20		B
N	28	6406 3700	Battery cover L171B	A312939-2	0	1	0	20		B
N	29	6406 3710	Battery cover L171C	A312939-3	0	0	1	20		B
N	30	6405 6370	Logo plate L171	A312952-1	1	0	0	5		C
N	31	6406 3720	Logo plate L171B	A312952-2	0	1	0	5		C
N	32	6406 3730	Logo plate L171C	A312952-3	0	0	1	5		C
N	33	6405 6400	Label A-L171	A413611-1	1	0	0	20		C
N	34	6406 3740	Label A-L171B	A413611-3	0	1	0	20		C
N	35	6406 3750	Label A-L171C	A413611-4	0	0	1	20		C
N	36	6405 6410	Label B-L171	A413612-1	1	1	1	20		C
N	37	6405 6430	Adhesive tape A-L171	A413617-1	1	1	1	20		C
N	38	6405 6440	Blind L171	A413625-1	1	1	1	20		C
	39	7435 9096	Buzzer	EFB-S55C42AP4	1	1	1	5		X
	40	6403 5420	Switch knob L170	A312399-1	1	1	1	10		C
N	41	6405 6320	Knob L171	A210910-5	1	0	0	20		C
N	42	6406 3760	Knob L171B	A210910-10	0	1	0	20		C
N	43	6406 3770	Knob L171C	A210910-11	0	0	1	20		C
N	44	6405 6380	Label C-L171	A412897-2	1	1	1	20		C
	45	6334 7860	Screw A-G361	A33953-13	4	4	4	50		C
	46	6327 1850	Screw A-G198	A44508-1	3	3	3	50		C
	47	6323 1011	Insulation seal G106	A43065-1	1	1	1	10		C
	48	6403 7661	Battery cover L170	A310945A-2	1	1	1	10		C
	49	6390 0431	Cap V332	A310765A-1	1	1	1	10		C
	50	6403 5870	Nut L170	A411957-2	1	1	1	20		C
	51	6391 8831	Reset key V160	A311024A-1	1	1	1	20		C
	52	6324 1962	Contact spring G118	A43333-1	1	1	1	5		C
	53	6398 8940	Battery spring L383	A311808-1	2	2	2	10		C
	54	6329 7621	Battery spring A-G272	A33938A-1	2	2	2	20		C
	55	6329 7660	Battery insulation seal G272	A45154-1	2	1	1	10		C
	56	6330 4750	Buzzer tape G333	A45381-1	1	1	1	20		X
	57	6394 2260	Tape B-V367	A411609-1	1	1	1	20		C
	58	6403 5440	Decoration screw A-L170	A412892-1	1	0	1	20		C
	59	6388 1650	Decoration screw A-V540	A49055-4	0	1	0	20		C
N	60	6386 7180	Decoration screw V355	A49055-3	1	1	1	20		B
	61	0008 7299	Shaft	2H7XL12	2	2	2	20		C

M – Minimum order/supply quantity
R – Rank
Q'ty – Quantity used per unit

A: Essential
B: Stock recommended
C: Others
X: No stock recommended

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